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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,366	03/24/2004	Akihiro Wasai	065905-0316	3958

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EXAMINER

WALBERG, TERESA J

ART UNIT	PAPER NUMBER
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3742

DATE MAILED: 08/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/807,366	Applicant(s) WASAI ET AL.	
	Examiner Teresa J. Walberg	Art Unit 3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7-20 is/are rejected.
- 7) ☒ Claim(s) 4-6 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) -
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

1. Claims 3, 4, and 13 are objected to because of the following informalities:

Claim 3 at lines 2-3 lacks antecedent for "the inner surfaces".

Claim 4 at line 3 lacks antecedent for "the grooves".

Claim 13 "parallel" is misspelled.

Appropriate correction is required.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Yokoyama et al (6,340,810).

Yokoyama et al disclose an induction heat fixing device including (see Fig. 7) a heat roller (34), a magnetic field generator (col. 6, lines 20-49), a pressure roller (see Fig. 1) that rotates jointly with the heat roller (34), the magnetic field generator including a cylindrical bobbin (41) with an electric wire (42) wound around to form a coil on the outer surface and flanges (4440 in Fig. 7) formed at both ends of the main bobbin.

With respect to claim 7, the coil guide comprising spiral grooves, on which the electric wire is fitted, see grooves 46 shown in Fig. 3.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3, 8-13, and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokoyama et al (6,340,810) in view of Cannon (3,508,024).

Yokoyama et al disclose an induction heat fixing device having the claimed structure with the exception of plural coil units and tubular and radial guides for the lead wires.

Cannon discloses an inductively heated roller having a plurality of coil units and tubular and radial guides for the lead wires. See Fig. 1.

It would have been obvious in view of Cannon to use plural coil units having lead wire guides in the heated roller of Yokoyama et al, to enable easier assembly of a heated roller having axially spaced coils.

6. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokoyama et al (6,340,810) in view of Cannon (3,508,024) as applied to claims 3, 8-13, and 16-19 above, and further in view of Kitano (2003/0042251).

Yokoyama et al in view of Cannon disclose the claimed structure, with the exception of the coil units being excited by different resonance frequencies.

Kitano discloses a heated roller having a plurality of coil units being excited by different resonant frequencies. See page 3, paragraph 0037.

It would have been obvious in view of Kitano to provide separate power supply frequencies to the coils of Yokoyama et al in view of Cannon to enable more independent temperature control of the individual coils.

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7. Claims 2 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokoyama et al in view of Cannon as applied to claims 3, 8-13, and 16-19 above, and further in view of Miyahara et al (JP 2001-312165).

Yokoyama et al in view of Cannon disclose the claimed structure with the exception of the coils having different axial lengths and numbers of turns.

Miyahara et al discloses that it is know in the art to use axial lengths and different numbers of turns for the coils of a heated roller. See Fig. 1b.

It would have been obvious in view of Miyahara et al to use coils having different lengths and different numbers of turns in the heated roller of Yokoyama et al in view of Cannon to better adjust the heating capacity of that section of coil.

8. Claims 4-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not disclose or render obvious induction heated fixing rollers having signs indicating the type of electric wire and winding direction shown on the electric wire guides and the bobbin. While it has been conventional for many years for coils of wire to be sold in the form of bobbins labeled on their flanges with the type of wire, this would not render it obvious to provide wire identification labels (signs) on the coil supports of an induction roller.

It is further noted that the prior art of record does not appear to disclose induction heated fixing rollers having coil bobbins with flanges which have circumferentially differing radial protrusions and wherein the flanges interact with the flanges on adjoining coil bobbins .

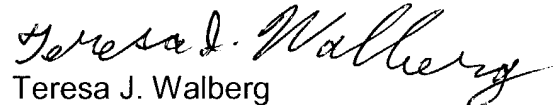
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Feldhoff et al, Tanaka et al, Okabayashi et al, Yokozeki (2003/0000943), and Yokozeki et al (2002/0125244) are cited to show inductively heated rollers with a plurality of coils.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Teresa J. Walberg whose telephone number is 703-308-1327. The examiner can normally be reached on M-F 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 703-305-5766. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Teresa J. Walberg
Primary Examiner
Art Unit 3742

tjw